

**03050205-040**  
**(Indian Field Swamp)**

### General Description

Watershed 03050205-040 is located in Dorchester and Orangeburg Counties and consists primarily of **Indian Field Swamp** and its tributaries. The watershed occupies 101,992 acres of the Lower Coastal Plain region of South Carolina. The predominant soil types consist of an association of the Goldsboro-Lynchburg-Rains-Hobcaw-Mouzon series. The erodibility of the soil (K) averages 0.19, and the slope of the terrain averages 1%, with a range of 0-2%. Land use/land cover in the watershed includes: 42.2% forested land, 30.7% agricultural land, 21.8% forested wetland (swamp), 3.3% barren land, 1.3% urban land, 0.5% nonforested wetland (marsh), and 0.2% water.

Mill Branch and Snell Branch combine to form Indian Field Swamp, which eventually drains into the Edisto River. Downstream from the confluence, Dove Branch and Wadboo Branch enter the swamp, followed by Spring Branch, Big Branch, Tom and Kate Branch, Pineland Branch, Millpond Branch, and Gum Branch. Polk Swamp (Bear Branch, Cowtail Creek) flows past the Town of St. George and drains into Indian Field Swamp at the base of the watershed. There are a total of 163.3 stream miles and 87.4 acres of lake waters in this watershed. Indian Field Swamp and Polk Swamp are classified FW\* (Site specific standards - DO not less than 4.0 mg/l, pH between 5.0-8.5 SU), and the remaining streams are classified FW.

### Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
E-016	P/W	FW*	POLK SWAMP AT S-18-180, 2 MILES S OF ST. GEORGE
E-109	W/INT/BIO	FW*	POLK SWAMP AT S-18-19
E-597	BIO	FW*	INDIAN FIELD SWAMP AT US 78
E-032	W/INT	FW*	INDIAN FIELD SWAMP AT S-18-19

**Indian Field Swamp** – There are two SCDHEC monitoring sites along Indian Field Swamp. Aquatic life uses are fully supported at the upstream site (**E-597**) based on macroinvertebrate community data. At the downstream site (**E-032**), aquatic life uses are partially supported due to dissolved oxygen excursions, compounded by a significant decreasing trend in dissolved oxygen concentration. There is a significant increasing trend in pH. A significant decreasing trend in five-day biochemical oxygen demand suggests improvements for this parameter. Recreational uses are partially supported due to fecal coliform excursions.

**Polk Swamp** - There are two SCDHEC monitoring sites along Polk Swamp. At the upstream site (**E-016**), aquatic life uses are not supported due to dissolved oxygen excursions, compounded by a significant decreasing trend in dissolved oxygen concentration. A significant decreasing trend in total nitrogen concentration suggests improving conditions for this parameter. Recreational uses are not supported at this site due to fecal coliform bacteria excursions.

At the downstream site (**E-109**), aquatic life uses are not supported due to dissolved oxygen excursions supported by impacts to the macroinvertebrate community. In addition, there is a significant decreasing trend in dissolved oxygen concentration. Recreational uses are partially supported at this site due to fecal coliform bacteria excursions; however, a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

## NPDES Program

### *Active NPDES Facilities*

<i>RECEIVING STREAM FACILITY NAME PERMITTED FLOW @ PIPE (MGD)</i>	<i>NPDES# TYPE COMMENT</i>
TOM AND KATE BRANCH LAFARGE MATERIALS, INC. PIPE #: 001 FLOW: 3.0	SC0022586 MINOR INDUSTRIAL
TOM AND KATE BRANCH TOWN OF HARLEYVILLE PIPE #: 001 FLOW: 0.15	SC0038504 MINOR DOMESTIC WETLAND
POLK SWAMP TOWN OF ST. GEORGE PIPE #: 001 FLOW: 0.80	SC0025844 MINOR DOMESTIC WETLAND

## Nonpoint Source Management Program

### *Mining Activities*

<i>MINING COMPANY MINE NAME</i>	<i>PERMIT # MINERAL</i>
PAUL W. JONES HAULING P&M MINE	0950-35 SAND
LAFARGE MATERIALS, INC. HARLEYVILLE QUARRY	0110-35 LIME
PALMETTO SAND COMPANY INDIAN FIELD CREEK PLANT	0786-35 SAND

## Growth Potential

Portions of this watershed, which contains the Towns of Reevesville and St. George, and a portion of the Town of Harleyville, have a moderate to high potential for growth. Interstate 95 crosses U.S. 78 near St. George in the center of the watershed. This interchange area has a high growth potential, particularly if U.S. 78 is widened as proposed. The I-95 interchange with U.S. 178 is another growth area. A rail line parallels U.S. 78 through St. George and together with the presence of I-95, provides a high industrial growth potential.